

## SPECIFICATION

Page 3, paragraph 37, second sentence, replace with the following new sentence:

The methods described are preferably performed on the upper surface area of the substrate 11, however, the device and methods could be modified such that the method occurs within a reaction chamber ~~35~~ 37 created within the substrate thickness 15 or on the lower surface area 13 of the substrate 9.

Page 4, paragraph 47, first sentence, replace with the following new sentence:

This arrangement is such that a reaction chamber 37 is created between the substrate 9 and sample distributor lower surface area 35b, such that when the sample is applied to one side of the reaction chamber ~~35~~ 37, it will move according to capillary action so as to fill completely reaction chamber 37.

Page 5, paragraph 55, first sentence, replace with the following new sentence:

In use, the sample is applied to the ~~sample~~ reaction chamber 37 and contacts the reactant regions under a pH gradient applied via the gradient electrodes and under light conditions applied via the light source 47.

Page 5, paragraph 56, first sentence, replace with the following new sentence:

In this embodiment, the detection of regional photochemical changes occurring in the proximity of the reaction chamber ~~39~~ 37 can be detected by an imaging device 45 preferably spaced a distance from the substrate 9.